

Appl. No. 09/744,697
Amdt. dated May 28, 2004
Reply to Office Action of April 1, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listing of claims in this application:

Listing of claims:

1. (currently amended) A process for the manufacture of a crystalline molecular sieve containing phosphorus in its framework, which process comprises treating a synthesis mixture comprising a source of aluminum, a source of phosphorus, an organic template, and colloidal crystalline molecular sieve seeds for a time and at a temperature sufficient to form the desired crystalline molecular sieve, wherein the phosphorus-containing molecular sieve is selected from the group consisting of aluminophosphates and silicoaluminophosphates.
2. (cancelled)
3. (original) A process as claimed in claim 1, wherein the phosphorus-containing molecular sieve is of the CHA or LEV structure type.
4. (original) A process as claimed in claim 1, wherein the phosphorus-containing molecular sieve is SAPO-34.
5. (original) A process as claimed in claim 4, wherein the SAPO-34 is Ni-SAPO-34.
6. (original) A process as claimed in claim 4, wherein the percentage area contribution of Brønsted acid sites to the total OH area in the IR spectrum is at least 30%.
7. (previously presented) A process as claimed in claim 6, wherein said contribution is at least 50%.

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8. (original) A process as claimed in claim 1, wherein the seeds are of structure type LEV, OFF, or CHA.

9. (original) A process as claimed in claim 1, wherein the seeds are of Levyne, ZSM-45, Chabasite, Offretite, or SAPO-34.

10. (original) A process as claimed in claim 1, wherein the seeds are present in a proportion within the range of 1 to 2000 ppm, based on the total weight of the synthesis mixture.

11. (original) A process as claimed in claim 10, wherein the proportion is within the range of from 100 to 1500 ppm.

12. (original) A process as claimed in claim 10, wherein the proportion is within the range of from 100 to 250 ppm.

13. (original) A process as claimed in claim 1, wherein the seeds are incorporated in the synthesis mixture in the form of a suspension.

14. (original) A process as claimed in claim 1, wherein the particle size of the seeds is within the range of from 5 to 1000 nm.

15. (original) A process as claimed in claim 14, wherein the particle size is within the range of from 10 to 300 nm.

16. (original) A process as claimed in claim 14, wherein the particle size is within the range of from 20 to 100 nm.

17. (original) A process as claimed in claim 1, wherein the phosphorus-containing molecular

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sieve is of a first structure type and the seeds are of a second structure type.

18. (original) A process as claimed in claim 17, wherein the first structure type is CHA and the second structure type is LEV.

19. (original) The molecular sieve product of the process as claimed in claim 1.

20. (original) The molecular sieve of claim 19, in particulate or layer form.

21. (original) SAPO-34 in which the percentage area contribution of Broensted acid sites to the total OH area in the IR spectrum is at least 30%.

22. (original) A process for the conversion of an oxygenate to olefins which comprises contacting the oxygenate under catalytic conversion conditions with the molecular sieve of claim 19.

23. (previously presented) A process for the conversion, adsorption or separation of hydrocarbons which comprises contacting the hydrocarbons with the molecular sieve of claim 19, optionally after washing, cation exchange, or calcining.

24. (cancelled)

25. (currently amended) A process for the synthesis of a phosphorus-containing crystalline molecular sieve which comprises treating a synthesis mixture with colloidal crystalline molecular sieve seed crystals to control the particle size of the phosphorus-containing molecular sieve and/or the acceleration of the formation of the phosphorus-containing crystalline molecular sieve during synthesis, wherein the phosphorus-containing molecular sieve is selected from the group consisting of aluminophosphates and silicoaluminophosphates.